

FORM PTO-1449

U. S DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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ATTY. DOCKET NO.

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U 013209-3

09/758,017

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OLAV LANES, et al.

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1645 1652

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## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	AA						

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
						YES	NO
	AB						

## OTHER ART (Including Author, Title, Date, Pertinent Dates, Etc.)

ES	AC	Lindahl, T., <i>An N-glycosidase from Escherichia coli that releases free uracil from DNA containing deaminated cytosine residues</i> . Proc. Natl. Acad. Sci., (1974), 71(9): pp 3649-3653.
	AD	Kubota, Y., et al. <i>Reconstitution of DNA base excision-repair with purified human proteins; interaction between polymerase beta and the XRCC1 protein</i> . Embo J. (1996), 15(23): pp 6662-6670.
	AE	Nicholl, I.D., K. Nealon, and M.K. Kenny. <i>Reconstitution of human base excision repair with purified proteins</i> . Biochemistry (1997), 36(24): pp 7557-7566.
	AF	Parikh, S.S., C.D. Mol, and J.A. Tainer. <i>Base excision repair enzyme family portrait: integrating the structure and chemistry of an entire DNA repair pathway</i> . Structure (1997), 5(12): pp 1543-1550.
	AG	Slupphaug, G., et al. <i>Cell cycle regulation and in vitro hybrid arrest analysis of the major human uracil-DNA glycosylase</i> . Nucleic Acids Res., (1991), 19(19): pp 5131-5137.
	AH	Muller, S.J. and S. Caradonna. <i>Isolation and characterization of a human cDNA encoding uracil-DNA glycosylase</i> . Biochim. Biophys. Acta., (1991), 1088(2): pp 197-207.
	AI	Muller Weeks, S.J. and S. Caradonna. <i>Specific association of cyclin-like uracil-DNA glycosylase with the proliferating cell nuclear antigen</i> . Exp. Cell. Res., (1996). 226(2): pp 346-355.
	AJ	Haushalter, K.A., et al. <i>Identification of a new uracil-DNA glycosylase family by expression cloning using synthetic inhibitors</i> . Curr. Biol., (1999), 9(4): pp 174-185.
	AK	Gallineri, P. and J. Jiricny. <i>A new class of uracil-DNA glycosylases related to human thymine -DNA glycosylase</i> . Nature, (1996), 383(6602): pp 735-738.
✓	AL	Barrett, T.E., et al. <i>Crystal structure of a G:T/U mismatch-specific DNA glycosylase: mismatch recognition by complementary-strand interactions</i> . Cell, (1998), 92(1): pp 117-129.
ES	AM	Sandigursky, M. and W.A. Franklin. <i>Thermostable uracil-DNA glycosylase from Thermotoga maritima a member of a novel class of DNA repair enzymes</i> , Curr. Biol., (1999), 9(10): pp 531-534.

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OLAV LANES, et al.	
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ED	AN	Krokan, H.E., R. Standal, and G. Slupphaug, <i>DNA glycosylases in the base excision repair of DNA</i> . Biochem. J., (1997), 325(Pt. 1): pp 1-16.
	AO	Higley, M. and R.S. Lloyd, <i>Processivity of uracil DNA glycosylase</i> . Mutat. Res., (1993), 294(2): pp 109-116.
	AP	Bennett, S.E., R.J. Sanderson, and D.W. Mosbaugh, <i>Processivity of Escherichia coli and rat liver mitochondrial uracil-DNA glycosylase is affected by NaCl concentration</i> , Biochemistry, (1995), 34(18): pp 6109-6119.
	AQ	Purmal, A.A., et al. <i>Uracil DNA N-glycosylase distributively interacts with duplex polynucleotides containing repeating units of either TGGCCAAGCU or TGGCCAAGCTTGGCCAAGCU</i> , J.Biol. Chem., (1994), 269(35): pp 22046-22053.
	AR	Colson, P. and W.G. Verly, <i>Intracellular localization of rat-liver uracil-DNA glycosylase. Purification and properties of the chromatin enzyme</i> , Eur.J. Biochem., (1983), 134(3): pp 415-420.
	AS	Domena, J.D. and D.W. Mosbaugh, <i>Purification of nuclear and mitochondrial uracil-DNA glycosylase from rat liver. Identification of two distinct subcellular forms</i> . Biochem., (1985), 24(25): pp 7320-7328.
	AT	Domena, J.D., et al. <i>Purification and properties of mitochondrial uracil-DNA glycosylase from rat liver</i> , Biochem., (1988), 27(18): pp 6742-6751.
	AU	Seal, G., P. Arenaz and M.A. Sirover, <i>Purification and properties of the human placental uracil DNA glycosylase</i> . Biochim. Biophys. Acta., (1987), 925(2): pp 226-233
	AV	Wittwer, C.U., G. Bauw, and H.E. Krokan. <i>Purification and determination of the NH2-terminal amino acid sequence of uracil-DNA glycosylase from human placenta</i> . Biochemistry, (1989), 28(2): pp 780-784.
	AW	Krokan, H. and C.U. Wittwer. <i>Uracil DNA-glycosylase from HeLa celles: general properties, substrate specificity and effect of uracil analogs</i> , Nucleic Acids Res., (1981), 9(11): pp 2599-2613
	AX	Wittwer, C.U. and H. Krokan. <i>Uracil-DNA glycosylase in HeLa S3 cells: interconvertibility of 50 and 20 kDa forms and similarity of the nuclear and mitochondrial form of the enzyme</i> , Biochim. Biophys. Acta., (1985), 832(3): pp 308-318.
	AY	Myrnes, B. and C.U. Wittwer. <i>Purification of the human O6-methylguanine-DNA methyltransferase and uracil-DNA glycosylase, the latter to apparent homogeneity</i> , Eur. J. Biochem., (1988), 173(2):pp 383-387.
	AZ	Caradonna, S., et al. <i>Affinity purification and comparative analysis of two distinct human uracil-DNA glycosylases</i> , Exp. Cell Res., (1996), 222(2): pp 345-359.
ED	BA	Muller-Weeks, S., B. Mastran, and S. Caradonna. <i>The nuclear isoform of the highly conserved human uracil-DNA glycosylase is an Mr 36,000 phosphoprotein</i> . J. Biol. Chem., (1998), 273(34): pp 21909-21917.
ED	BB	Seal, G., R.J. Tallarida, and M.A. Sirover. <i>Purification and properties of the uracil DNA glycosylase from Bloom's syndrome</i> . Biochim. Biophys. Acta., (1991), 1097(4): pp 299-308.

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		U 013209-3	09/758,017
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(Use several sheets if necessary)		OLAV LANES, et al.	
		FILING DATE	GROUP 3 2003 January 10, 2001 2645 632

OTHER ART (Including Author, Title, Date, Pertinent Dates, Etc.)

ED	BC	Caradonna, S.J., and Y.C. Cheng. <i>Uracil DNA-glycosylase. Purification and properties of this enzyme isolated from blast cells of acute myelocytic leukemia patients.</i> J. Bio. Chem., (1980), 255(6): pp 2293-2300.
	BD	Talpaert-Borle, M., L. Clerici, and F. Campagnari. <i>Isolation and characterization of a uracil-DNA glycosylase from calf thymus.</i> J. Biol. Chem., (1979), 254(14): pp 6387-6391.
	BE	Talpaert-Borle, M., F. Campagnari, and D.M. Creissen. <i>Properties of purified uracil-DNA glycosylase from calf thymus. An in vitro study using synthetic DNA-like substrates.</i> J. Biol. Chem., (1982), 257(3): pp 1208-1214.
	BF	Guyer, R.B., J.M. Nonnemacher, and R.A. Deering. <i>Uracil-DNA glycosylase activity from Dictyostelium discoideum.</i> Biochim. Biophys. Acta., (1986), 868(4): pp 262-264.
	BG	Crosby, B., et al. <i>Purification and characterization of a uracil-DNA glycosylase from the yeast Saccharomyces cerevisiae.</i> Nucleic Acids Res., (1981), 9(21): pp 5797-5809.
	BH	Blaisell, P. and H. Warner. <i>Partial purification and characterization of a uracil-DNA glycosylase from wheat germ.</i> J. Biol. Chem., (1983), 258(3): pp 1603-1609.
	BI	Talpaert-Borle, M. and M. Liuzzi. <i>Base-excision repair in carrot cells. Partial purification and characterization of uracil-DNA glycosylase and apurinic/apyrimidinic endodeoxyribonuclease.</i> Eur. J. Biochem., (1982), 124(3): p 435-440.
	BJ	Birch, D.J. and A.G. McLennan. <i>Uracil-DNA glycosylase in developing embryos of the brine shrimp (Artemia salina).</i> Biochem. Soc. Trans., (1980), 8(6): pp 730-731.
	BK	Lindahl, T., et al. <i>DNA N-glycosidases; properties of uracil-DNA glycosidase from Escherichia coli.</i> J. Biol. Chem., (1977), 252(10): pp 3286-3294.
	BL	Cone, R. et al. <i>Partial purification characterization of a uracil DNA N-glycosidase from Bacillus subtilis.</i> Biochemistry, (1977), 16(14): p 3194-3201.
	BM	Williams, M.V. and J.D. Pollack. <i>A mollicute (mycoplasma) DNA repair enzyme: purification and characterization of uracil-DNA glycosylase.</i> J. Bacteriol., (1990), 172(6): pp 2979-2985.
	BN	Kaboev, O.K., et al. <i>Uracil-DNA glycosylase from Bacillus stearothermophilus.</i> FEBS Lett., (1981), 132(2): pp 337-340.
	BO	Purnapatre, K. And U. Varshney. <i>Uracil DNA glycosylase from Mycobacterium smegmatis and its distinct biochemical properties.</i> Eur. J. Biochem., (1998), 256(3): pp 580-588.
ED	BP	Kaboev, O.K., L.A. Luchkina, and T.I. Kuziakina. <i>Uracil-DNA glycosylase of thermophilic Thermothrrix thiopara.</i> J. Bacteriol., (1985), 164(1): pp 421-424.
ED	BQ	Masters, C.I., B.E. Moseley, and K.W. Minton. <i>AP endonuclease and uracil DNA glycosylase activities in Deinococcus radiodurans.</i> Mutat. Res., (1991), 254(3): pp 263-272.

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<i>ES</i>	BR	Koulis, A., et al. <i>Uracil-DNA glycosylase activities in hyperthermophilic micro-organisms</i> . FEMS Microbiol. Letts., (1996), 143(2-3): pp 267-271.	TECH CENTER 1600/2900
<i>ES</i>	BS	Leblanc, J.P., et al. <i>Uracil-DNA glycosylase. Purification and properties of uracil-DNA glycosylase from Micrococcus luteus</i> . J. Biol. Chem., (1982), 257(7): pp 3477-3483.	
	BT	Sobek, H., et al. <i>Heat-labile uracil-DNA glycosylase: purification and characterization</i> . FEBS Lett., (1996), 388(1): pp 1-4. <i>cited on PTO -1449 3/19/01 ES 5/29/03</i>	
<i>ES</i>	BU	Focher, F., et al. <i>Herpes simplex virus type 1 uracil-DNA glycosylase: isolation and selective inhibition by novel uracil derivatives</i> . Biochem. J., (1993), 292(Pt. 3): pp 883-889.	
	BV	Winters, T.A. and M.V. Williams. <i>Purification and characterization of the herpes simplex virus type 2-encoded uracil-DNA glycosylase</i> . Virology, (1993), 195(2): pp 315-326.	
	BW	Slupphaug, G., et al. <i>Nuclear and mitochondrial forms of human uracil-DNA glycosylase are encoded by the same gene</i> . Nucleic Acids Res., (1993), 21(11): pp 2579-2584.	
	BX	Nilsen, H., et al. <i>Nuclear and mitochondrial uracil-DNA glycosylases are generated by alternative splicing and transcription from different positions in the UNG gene</i> . Nucleic Acids Res., (1997), 25(4): pp 750-755.	
	BY	Bharati, S., et al. <i>Human mitochondrial uracil-DNA glycosylase preform (UNG1) is processed to two forms one of which is resistant to inhibition by AP sites</i> . Nucleic Acids Res., (1998), 26(21): pp 4953-4959.	
	BZ	Haug, T., et al. <i>Regulation of expression of nuclear and mitochondrial forms of human uracil-DNA glycosylase</i> . Nucleic Acids Res., (1998), 26(6): pp 1449-1457.	
	CA	Otterlei, M., et al. <i>Nuclear and mitochondrial splice forms of human uracil-DNA glycosylase contain a complex nuclear localisation signal and a strong classical mitochondrial localisation signal, respectively</i> . Nucleic Acids Res., (1998), 26(20): pp 4611-4617.	
	CB	Mol, C.D., et al. <i>Crystal structure and mutational analysis of human uracil-DNA glycosylase: Structural basis for specificity and catalysis</i> . Cell, (1995), 80(6): pp 869-878.	
	CC	Savva, R., et al. <i>The structural basis of specific base-excision repair by uracil-DNA glycosylase</i> . Nature, (1995), 373(6514): pp 487-493.	
	CD	Ravishankar, R., et al. <i>X-ray analysis of a complex of Escherichia coli uracil DNA glycosylase (EcUDG) with a proteinaceous inhibitor. The structure elucidation of a prokaryotic UDG</i> . Nucleic Acids Res., (1998), 26(21): pp 4880-4887.	
<i>ES</i>	CE	Slupphaug, G., et al. <i>A nucleotide-flipping mechanism from the structure of human uracil-DNA glycosylase bound to DNA</i> . Nature, (1996), 384(6604): pp 87-92.	
<i>ES</i>	CF	Parikh, S.S., et al. <i>Base excision repair initiation revealed by crystal structures and binding kinetics of human uracil-DNA glycosylase with DNA</i> . Embo. J., (1998), 17(17): pp 5214-5226.	

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<i>38</i>	CG	Feller, G. and C. Gerday. <i>Psychrophilic enzymes: molecular basis of cold adaptation.</i> Cell Mol. Life Sci., (1997), 53(10): pp 830-841.
	CH	Kwok, S., and R. Higuchi. <i>Avoiding false positives with PCR.</i> Nature, (1989), 339: pp 237-238.
	CI	Longo, M.C., M.S. Berningr, and J.L. Hartley. <i>Use of uracil DNA glycosylase to control carry-over contamination in polymerase chain reactions.</i> Gene (1990), 93: pp 125-128
	CJ	Male, R., et al. <i>Molecular cloning and characterization of anionic and cationic variants of trypsin from Atlantic salmon.</i> Eur.J. Biochem., (1995), 232(2): pp 677-685.
	CK	Slupphaug, G., et al. <i>Properties of a recombinant human uracil-DNA glycosylase from the UNG gene and evidence that UNG encodes the major uracil-DNA glycosylase.</i> Biochemistry, (1995), 34(1): pp 128-138.
	CL	Bennett, S.E., M.I. Schimerlik, and D.W. Mosbaugh. <i>Kinetics of the uracil-DNA glycosylase/inhibitor protein association. Ung interaction with Ugi, nucleic acids, and uracil compounds.</i> J.Biol.Chem., (1993), 268(36): pp 26879-26885.
	CM	Karran, P., R. Cone, and E.C. Friedberg. <i>Specificity of the bacteriophage PBS2 induced inhibitor of uracil-DNA glycosylase.</i> Biochemistry, (1981), 20(21): pp 6092-6096.
	CN	Mol, C.D., et al. <i>Crystal structure of human uracil-DNA glycosylase in complex with a protein inhibitor: protein mimicry of DNA.</i> Cell, (1995), 82(5): pp 701-708.
	CO	von Hippel, P.H. and O.G. Berg. <i>Facilitated target location in biological systems.</i> J. Biol.Chem., (1989), 264(2): pp 675-678.
	CP	Dodson, M.L., M.L. Michaels, and R.S. Lloyd. <i>Unified catalytic mechanism for DNA glycosylases.</i> J. Biol. Chem., (1994), 269(52): pp 32709-32712.
	CQ	Hamilton, R.W. and R.S. Lloyd. <i>Modulation of the DNA scanning activity of the Micrococcus luteus UV endonuclease.</i> J. Biol. Chem., (1989), 264(29): pp 17422-17427.
	CR	Berglund, G.I., et al. <i>Purification and characterization of pancreatic elastase from North Atlantic salmon (Salmo salar).</i> Mol. Mar. Biol. Biotechnol., (1998), 7(2): pp 105-114.
	CS	Kunkel, T.A. <i>Rapid and efficient site-specific mutagenesis without phenotypic selection.</i> Proc. Natl. Acad. Sci., USA, (1985), 82: pp 488-492.
<i>38</i>	CT	Varshney, U. and J.H. van de Sande. <i>Characterization of the ung1 mutation of Escherichia coli.</i> Nucleic Acids Res., (1989), 17(2): pp 813
<i>38</i>	CU	Amann, E., B. Ochs, and K.J. Abel. <i>Tightly regulated tac promoter vectors for the expression of unfused and fused proteins in Escherichia coli.</i> Gene, (1988), 69: pp 301-315.

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